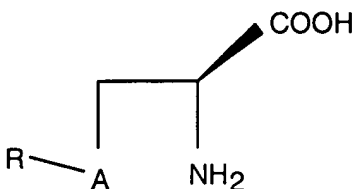


IN THE CLAIMS

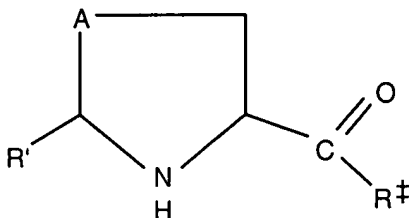
1. (currently amended) A prodrug of the formula:



where A is ~~a sulfur or a selenium~~, and R is ~~derived from~~ a mono- di- or oligo-saccharide.

Claims 3-8 (cancelled)

9. (currently amended) A prodrug of the formula:



where A is ~~sulfur or~~ selenium, and

R' is ~~derived from~~ a sugar and R' has having the formula (CHOH)<sub>n</sub>CH<sub>2</sub>OH, where n is 1 to 5, or

R' is ~~also be~~ an alkyl or aryl group, or

R' is =O, and

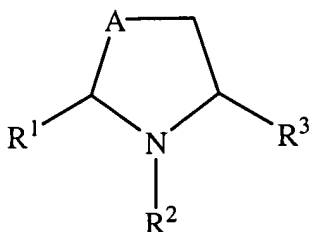
R<sup>+</sup> is an alkoxy, or an amine group.

10. (original) A prodrug as in Claim 9 wherein R<sup>+</sup> is -OR<sup>1</sup> where R<sup>1</sup> is ethyl, or methyl.
11. (original) A prodrug as in Claim 9 wherein R' is methyl, ethyl, benzyl, carboxyl, or phenyl.
12. (original) A prodrug as in Claim 9 wherein R<sup>+</sup> is -NR<sup>†</sup><sub>2</sub>, wherein the R<sup>†</sup> groups are the same or different and are hydrogen or alkyl.

13. (original) A prodrug as in Claim 11 wherein at least one  $R^1$  is methyl.

Claims 14 and 15 (cancelled)

16. (new) A method for reducing the toxic insult in a mammal, comprising administering the prodrug of claim 1.
17. (new) A method for (1) reducing unwanted side effects of chemo- or radiotherapy of cancer, (2) improving cardiovascular function, (3) preventing mutagenesis, (4) preventing the initiation and/or progression of cancer, (5) reducing toxic consequences of planned or unplanned radiation or chemical exposures, (6) slowing the aging process, or (7) preventing cataract formation in a mammal comprising administering to the mammal the prodrug of claim 1.
18. (new) A method for reducing the toxic insult in a mammal, comprising administering to the mammal a prodrug having the formula



wherein

- (1) A is selenium,  
 $R^1$  is a sugar having the formula  $(CHOH)_nCH_2OH$ , where n is 1 to 5, or  $R^1$  is an alkyl or aryl group, or  $R^1$  is  $=O$ ,  
 $R^2$  is  $CH_2CH_2CH_2N(R^4)_2$ , wherein  $R^4$  may be the same or different and may be hydrogen, alkyl, alkoxy, or carboxy; and  
 $R^3$  is hydrogen;
- (2) A is selenium,  
 $R^1$  is a sugar having the formula  $(CHOH)_nCH_2OH$ , where n is 1 to 5, or  $R^1$  is an alkyl or aryl group, or  $R^1$  is  $=O$ ,

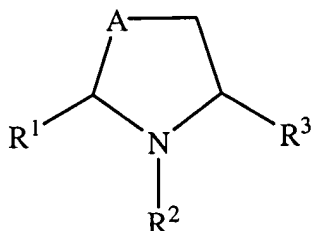
$R^2$  is hydrogen,  $R^3$  is  $COR^5$ , wherein  $R^5$  is an alkoxy, or an amine group;  
or

(3) A is selenium,

$R^1$  is a sugar having the formula  $(CHOH)_nCH_2OH$ , where n is 1 to 5, or  $R^1$  is an alkyl or aryl group, or  $R^1$  is  $=O$ ,

$R^2$  is hydrogen, and  $R^3$  is hydrogen or  $COOH$ .

19. (new) A method for (1) reducing unwanted side effects of chemo- or radiotherapy of cancer, (2) improving cardiovascular function, (3) preventing mutagenesis, (4) preventing the initiation and/or progression of cancer, (5) reducing toxic consequences of planned or unplanned radiation or chemical exposures, (6) slowing the aging process, or (7) preventing cataract formation in a mammal comprising administering the mammal a prodrug having the formula



wherein

(1) A is selenium,

$R^1$  is a sugar having the formula  $(CHOH)_nCH_2OH$ , where n is 1 to 5, or  $R^1$  is an alkyl or aryl group, or  $R^1$  is  $=O$ ,

$R^2$  is  $CH_2CH_2CH_2N(R^4)_2$ , wherein  $R^4$  may be the same or different and may be hydrogen, alkyl, alkoxy, or carboxy; and

$R^3$  is hydrogen;

(2) A is selenium,

$R^1$  is a sugar having the formula  $(CHOH)_nCH_2OH$ , where n is 1 to 5, or  $R^1$  is an alkyl or aryl group, or  $R^1$  is  $=O$ ,

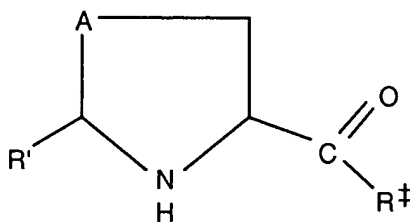
$R^2$  is hydrogen,  $R^3$  is  $COR^5$ , wherein  $R^5$  is an alkoxy, or an amine group;  
or

(3) A is selenium,

$R^1$  is a sugar having the formula  $(CHOH)_nCH_2OH$ , where n is 1 to 5, or  $R^1$  is an alkyl or aryl group, or  $R^1$  is  $=O$ ,

$R^2$  is hydrogen, and  $R^3$  is hydrogen or  $COOH$ .

20. (new) A prodrug of the formula



where A is sulfur or selenium, and

$R'$  is an alkyl or aryl group, or

$R'$  is  $=O$ , and

$R^+$  is an alkoxy, or an amine group.

A!  
concl'd